

I CLAIM:

1 1. Apparatus for displaying an image of tissue at the distal end of an endotracheal
2 tube, said apparatus comprising in combination:

3 a) a source of light disposed at the distal end of said endotracheal tube for
4 illuminating the tissue to be imaged;

5 b) a lens for receiving the image of the tissue;

6 c) a low cost camera for recording the image and including a fiber optic bundle
7 interconnecting said lens with said camera to convey the image to said camera;

8 d) a low cost radio frequency transmitter for receiving the image from said camera
9 and for transmitting the image;

10 e) a low cost radio frequency receiver for receiving the image; and

11 f) a video monitor for displaying the image received by said receiver.

1 2. The apparatus as set forth in Claim 1 including batteries for providing power to
2 said camera and to said transmitter.

1 3. The apparatus as set forth in Claim 1 wherein said source of light comprises at
2 least one light emitting diode and a fiber optic bundle for transmitting light to an illumination
3 port disposed at the distal end of said endotracheal tube.

1 4. The apparatus as set forth in Claim 2 wherein said camera, said transmitter and
2 said batteries are a modular unit.

1 5. The apparatus as set forth in Claim 3 wherein said camera, said transmitter and
2 said batteries are a modular unit.

1 6. The apparatus as set forth in Claim 5 wherein the terminal ends of said fiber optic
2 bundles from said lens and from said illumination port are secured to a first plug and including a
3 second plug coupled with said modular unit for disengageably engaging said first plug.

4 7. The apparatus as set forth in Claim 4 wherein said modular unit is portable.

1 8. The apparatus as set forth in Claim 4 wherein said source of light comprises at
2 least one light emitting diode and a fiber optic bundle for transmitting light to an illumination
3 port disposed at the distal end of said endotracheal tube.

1 9. A method for displaying an image of tissue at the distal end of an endotracheal
2 tube, said method comprising the steps of:

- 3 a) illuminating the tissue;
- 4 b) conveying an image of the illuminated tissue to a modular unit;
- 5 c) recording the image with a camera disposed in the modular unit;
- 6 d) transmitting the recorded image;
- 7 e) receiving the transmitted image; and
- 8 f) displaying the received image.

1 10. The method as set forth in Claim 9 wherein said step of transmitting comprises
2 the step of transmitting with a radio frequency transmitter and said step of receiving comprises
3 the step of receiving with a radio frequency receiver.

1 11. The method as set forth in Claim 9 wherein said step of displaying comprises the
2 step of displaying the image on a video monitor.

1 12. The method as set forth in Claim 9 wherein said step of illuminating comprises
2 the step of energizing at least one light emitting diode and including the step of conveying the
3 light from the light emitting diode to an illumination port with a fiber optic bundle.

1 13. The method as set forth in Claim 9 wherein said step of conveying comprises the
2 step of conveying the image from a lens to the camera with a fiber optic bundle.

1 14. Apparatus for displaying an image of tissue at the distal end of an endotracheal
2 tube, said apparatus comprising in combination:
3 a) a source of light for illuminating the tissue to be imaged;
4 b) a lens for receiving the image of the tissue;
5 c) a camera for recording the image and including a fiber optic bundle
6 interconnecting said lens with said camera to convey the image to said camera;
7 d) a transmitter for receiving the image from said camera and for transmitting the

8 image;

9 e) a receiver for receiving the transmitted image; and

10 f) a display for displaying the image received by said receiver.

1 15. The apparatus as set forth in Claim 14 including batteries for providing power to
2 said camera and to said transmitter.

1 16. The apparatus as set forth in Claim 14 wherein said source of light comprises at
2 least one light emitting diode and a fiber optic bundle for transmitting light to an illumination
3 port disposed at the distal end of said endotracheal tube.

1 17. The apparatus as set forth in Claim 15 wherein said camera, said transmitter and
2 said batteries are a modular unit.

1 18. The apparatus as set forth in Claim 16 wherein the terminal ends of said fiber
2 optic bundles from said lens and said illumination port are secured to a first plug and including a
3 second plug coupled with said camera and said source of light for disengageably engaging said
4 first plug.

1 19. The apparatus as set forth in Claim 18 including batteries for providing power to
2 said camera and to said transmitter.

1 20. The apparatus as set forth in Claim 17 wherein said modular unit is portable.